



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,688	03/05/2002	John Diachina	8194-596	8812
20792	7590	05/03/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			NGUYEN, BRIAN D	
PO BOX 37428				
RALEIGH, NC 27627			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/090,688	Applicant(s) DIACHINA ET AL.	
	Examiner Brian D. Nguyen	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2002.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-90 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/5/02 & 7/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 2-3, 5, 13-14, 28-29, 36-37, 41-42, 49-50, and 65 are objected to because of the following informalities:

Claim 2, line 8, “a third class” seems to refer back to “third class” in line 3 of claim 1. If this is true, it is suggested to change “a third class” to --the third class--.

Claim 3, line 2, “a third class” seems to refer back to “third class” in line 3 of claim 1. If this is true, it is suggested to change “a third class” to --the third class--.

Claim 5, line 2, “an application layer message” seems to refer back to “an application layer message” in line 3 of claim 4. If this is true, it is suggested to change “an application layer message” to --the application layer message--.

Claim 13, lines 2 and 4, it is suggested to change “contain information” to --contain embedded information--.

Claim 28, line 4, “a third class” seems to refer back to “third class” in line 3 of claim 27. If this is true, it is suggested to change “a third class” to --the third class--.

Claim 36, lines 2 and 4, it is suggested to change “contain information” to --contain embedded information--.

Claim 41, line 5, “a third class” seems to refer back to “third class” in line 3 of claim 40. If this is true, it is suggested to change “a third class” to --the third class--.

Claim 49, line 2, “a third class” seems to refer back to “third class” in line 3 of claim 48. If this is true, it is suggested to change “a third class” to --the third class--.

Claim 65, line 2, it is suggested to insert --embedded-- before “information”.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 69-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 69 recites the limitation "the first class" in 4. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent Therefore ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-22, 24-25, and 27-90 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9, 12-21, 24-26, 28-29, 32-37, 39-45, 47-51, 53-55, 57-62, 64-68, and 70-101 of copending Application No. 10/119,063. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

Art Unit: 2661

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 23 and 26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 23 and 26 of copending Application No. 10/119,063. Although the conflicting claims are not identical, they are not patentably distinct from each other because broaden the scope of the claims is obvious. It has been held that the omission of an element and its function is obvious expedient if the remaining elements perform the same function as before.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 8-22, 24-25, 27-61, 63-67, 69-71, 73-77, and 79-90 are rejected under 35 U.S.C. 102(b) as being anticipated by Raith (5,404,355).

Regarding claim 1, Raith discloses a method comprising: transmitting first, second and third classes of Packet System Information (PSI) messages on a Packet Broadcast Control Channel (PBCCH) at respective first, second and third repetition rates (see figures 4 & 10; col. 7, lines 53-66; col. 8, lines 63-65; col. 18, lines 33-34 & 49-60; col. 22, lines 66-68).

Regarding claims 2-3, Raith discloses the first class (FBCCH) is periodically transmitted (see figure 10; col. 21, line 23; col. 22, lines 66-68); successive portions of the second class (SBCCH) is transmitted between the first class (see figure 10); and the third class (EBCCH) following transmission of final message of the second class (see figure 10 where EBCCH follow SBCCH) and the third class is transmitted once per an integer multiple of transmission of the second class (the integer could be one; note that it is a matter of design choice to transmit the third class once per an integer multiple of the second class when the integer is greater than one).

Regarding claims 4-5, Raith discloses the third class (EBCCH) comprises extremely low repetition (see different rates in col. 19, line 59-col. 20, line 5. Note that EBCCH rate could be extremely low repetition), for sending variable length messages (see col. 23, lines 4-5) (note that this variable length messages could be information, embedded in a plurality of payload messages, from an application layer message).

Regarding claims 8-9, Raith discloses scheduling and indicating the transmission of the third message (see col. 21, lines 34-40; col. 23, lines 8-14).

Regarding claims 10-11, Raith discloses a method comprising transmitting messages on the broadcast control channel that contain embedded information from application layer messages at a lower repetition rate than that at which the system information messages are transmitted on the broadcast control channel, wherein the message comprises an identifying

Art Unit: 2661

portion formatted consistent with the system information messages and a payload portion including information from an application layer message (see col. 19, line 60-col. 20, line 5 for different rates and col. 23, lines 4-5 in which the payload contain variable length message).

Regarding claim 12, Raith discloses the first, second and third repetition rates (see different rates in col. 19, line 60-col. 20, line 5; col. 22, lines 66-68).

Regarding claim 13, Raith discloses different repetition rates (see col. 19, line 60-col. 20, line 5) (the integer could be one; note that it is a matter of design choice to transmit the third class once per an integer multiple of the second class when the integer is greater than one).

Regarding claim 14, Raith discloses the message that contains embedded information following transmission of a final message of the second class (see figure 10 where EBCCH follow SBCCH).

Regarding claim 15, claim 15 is a method claim that has substantially the same limitation as claim 5. Therefore, it is subject to the same rejection.

Regarding claims 16-17, claims 16-17 are method claims that have substantially the same limitation as claims 6-7. Therefore, they are subject to the same rejection.

Regarding claims 18-19, claims 18-19 are method claims that have substantially the same limitation as claims 8-9. Therefore, they are subject to the same rejection.

Regarding claim 20, Raith discloses a method comprising using payload messages multiplexed with packet system information messages transmitted on broadcast control channel as transport layer messages for an application (see figure 10 and col. 19, line 59-col. 20, line 5 where different information including, for example, a traffic accident is included in broadcast control channel).

Regarding claims 21-22, Raith discloses different information categories with different repetition rates (see col. 19, line 59-col. 20, line 5; col. 22, lines 6-15).

Regarding claim 24, Raith discloses a method comprising transmitting one extremely low repetition system information on a broadcast control channel per an integer multiple of cycles of transmission of low repetition PSI messages such that and ELR PSI message is transmitted following transmission of a final LR PSI message of a repeated transmitted sequence of LR PSI messages (see col. 19, line 59-col. 20, line 5 where Raith teaches of different repetition rates and col. 20, lines 26-33 where Raith teaches of dynamic allocation of slots for the BCCH).

Regarding claim 25, ELR PSI message is equivalent to EBCCH message.

Regarding claims 27-32, claims 27-32 are method claims that have substantially the same limitations as claims 1-4 and 8-9 except for the method is performed at the wireless terminal instead of at the communication system. Therefore, they are subject to the same rejection.

Regarding claims 33-39, claims 33-39 are method claims that have substantially the same limitations as method claims 10-14 and 18-19 except for the method is performed at the wireless terminal instead of at the communication system. Therefore, they are subject to the same rejection.

Regarding claims 40-44, claims 40-44 are base station claims that have substantially the same limitations as method claims 1-4 and 8. Therefore, they are subject to the same rejection.

Regarding claims 45-47, claims 45-47 are base station claims that have substantially the same limitations as method claims 10-11 and 18. Therefore, they are subject to the same rejection.

Art Unit: 2661

Regarding claims 48-53, claims 48-53 are wireless terminal claims that have substantially the same limitations as the respective method claims 27-32. Therefore, they are subject to the same rejection.

Regarding claims 54-58, claims 54-58 are wireless terminal claims that have substantially the same limitations as the respective method claims 34-35 and 38-39. Therefore, they are subject to the same rejection.

Regarding claims 59-61, claims 59-61 are apparatus claims that have substantially the same limitations as the respective method claims 1-2 and 4-8. Therefore, they are subject to the same rejection.

Regarding claims 63-67, claims 63-67 are apparatus claims that have substantially the same limitations as the respective method claims 10-11, 13 and 18-19. Therefore, they are subject to the same rejection.

Regarding claims 69-71, claims 69-71 are apparatus claims that have substantially the same limitations as the respective method claims 27-28 and 30-31. Therefore, they are subject to the same rejection.

Regarding claims 73-77, claims 73-77 are apparatus claims that have substantially the same limitations as the respective method claims 33-34, 36, and 38-39. Therefore, they are subject to the same rejection.

Regarding claims 79-81, claims 79-81 are computer program product claims that have substantially the same limitations as the respective method claims 1-2, 4, and 8. Therefore, they are subject to the same rejection.

Art Unit: 2661

Regarding claims 82-84, claims 82-84 are computer program product claims that have substantially the same limitations as the respective method claims 10-11 and 18. Therefore, they are subject to the same rejection.

Regarding claims 85-87, claims 85-87 are computer program product claims that have substantially the same limitations as the respective method claims 27-28 and 30-31. Therefore, they are subject to the same rejection.

Regarding claims 88-90, claims 88-90 are computer program product claims that have substantially the same limitations as the respective method claims 33-34 and 38. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 23, 26, 62, 68, 72, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith

Regarding claims 23 and 26, Raith discloses different information, including a traffic accident, can be included in the broadcast channel (see col. 19, lines 59-68). Raith does not specifically disclose the information is a location service. However, to include location service or any other service information in place of a traffic accident is a matter of choice. Therefore, it

Art Unit: 2661

would have been obvious to a person of ordinary skill in the art at the time the invention was made to include, for example, location service in order to inform the mobile its location.

Regarding claims 62, 68, 72, 78, Raith does not specifically disclose ASIC or circuit module. However, ASIC and circuit module are well known form in the art. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use ASIC or circuit module as they are well known to meet the design criteria of a particular implementation.

10. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith in view of Caves (6,266,343).

Regarding claims 6-7, Raith does not specifically disclose embedding information from first and second messages in a single ELR payload message. However, to combine multiple messages from multiple sources into a single payload message is well known in the art. Caves discloses data from users 1 and 2 are combined in a single payload and an indicator (pointer) is used to indicate the presence of multiple messages (see figure 2; col. 3, lines 3-8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine multiple messages into a single payload as taught by Caves in the system of Raith in order to meet specific needs.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2661

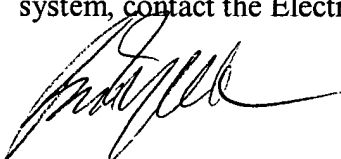
Chennakeshu et al (6,414,945), Lindskog et al (6,622,251), Backstrom et al (6,477,377), and Pearson (6,885,862).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



4/29/05

BRIAN NGUYEN
PRIMARY EXAMINER